

What is claimed is:

1. A method for treatment of heart failure comprising inducing phospholamban deficiency.
2. The method for treatment of heart failure of claim 1, wherein
5 an exogenous phospholamban protein induces phospholamban deficiency.
3. The method for treatment of heart failure of claim 2, wherein the exogenous phospholamban protein is selected from the group consisting of mutations of PLB, sense PLB, antisense PLB, truncated PLB, native PLB, and antibody against PLB.
- 10 4. The method for treatment of heart failure of claim 3, wherein the mutations of PLB comprise point mutations of PLB.
5. The method for treatment of heart failure of claim 3, wherein the antibody against PLB comprises contractilin.
6. A peptide based therapeutic agent for inhibiting
15 phospholamban activity consisting of a first peptide and a second peptide as a complex, wherein the first peptide comprises a transport peptide and the second peptide comprises a cargo peptide.
7. The peptide based therapeutic agent of claim 6, wherein the transport peptide is selected from the group consisting of penetratin,
20 adenovirus , bacterial and lipid vesicle based transport peptide.
8. The peptide based therapeutic agent of claim 6, wherein the cargo peptide is selected from the group consisting of mutations of PLB, sense PLB, antisense PLB, truncated PLB, and native PLB protein.
9. The peptide based therapeutic of claim 6, wherein the first
25 peptide transports the second peptide across a cell membrane.
10. The peptide based therapeutic of claim 6, wherein the first peptide and the second peptide are linked by a covalent linkage.
11. The peptide based therapeutic of claim 10, wherein the covalent linkage consists of a branched polylysine backbone, a single
30 peptide bond, or a disulfide bond.

12. A method for treatment of heart failure comprising enhancement of cardiac contractility by inhibition of PLB-SERCA2a interaction.

5 13. The method of claim 12, wherein the cardiac contractility is enhanced by inhibiting effect of PLB on sarcoplasmic reticulum Ca^{2+} ATPase.

14. The method of claim 12, wherein an exogenous phospholamban protein is used to inhibit phospholamban deficiency.

10 15. The method of claim 14, wherein the exogenous phospholamban protein is selected from the group consisting of mutations of PLB, sense PLB, antisense PLB, truncated PLB, native PLB, and antibody against PLB.

16. The method of claim 15, wherein the mutations of PLB comprise point mutations of PLB.

15 17. The method for treatment of heart failure of claim 15, wherein the antibody against PLB comprises contractilin.